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EXAMINER

LEUNG, JENNIFER A

ART UNIT

PAPER NUMBER

1774

MAIL DATE

DELIVERY MODE

12/01/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/593,499	Applicant(s) YALURIS ET AL.	
	Examiner JENNIFER A. LEUNG	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-11, 13-21, 23-29, 31-45, 47-56, 59-72, 74-79 and 82-85 is/are pending in the application.
- 4a) Of the above claim(s) 47-56 and 68-70 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32-45, 60-62, 64-67, 75, 76, 78, 79, 82, 83 and 85 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-11, 13-21, 23-29, 31, 71 and 72 is/are rejected.
- 7) ☒ Claim(s) 2, 28, 59, 63, 74, 77 and 84 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/30/10</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on September 30, 2010 has been considered. Claims 6, 12, 22, 30, 46, 57, 58, 73, 80 and 81 are canceled. Claims 47-56 and 68-70 are withdrawn. Claims 1-5, 7-11, 13-21, 23-29, 31-45, 59-67, 71, 72, 74-79 and 82-85 are under consideration.

Terminal Disclaimer

2. The terminal disclaimer filed on September 30, 2010 is improper.

The language "35 U.S.C. 154 to 156 and 173" is unacceptable because sections 155 and 156 do not define the term of the patent. It should be changed to --35 U.S.C. 154 and 173--.

Applicant is not required to pay another disclaimer fee as set forth in 37 CFR 1.20(d) when submitting a replacement or supplemental terminal disclaimer.

Claim Objections

3. Claims 2, 28, 59, 63, 74, 77 and 84 are objected to because of the following informalities:

In claim 2, "at least one storage bin" (at lines 1-2) should be changed to --a first storage bin--, and "the storage bin" (at lines 2-3) should be changed to --the first storage bin--, to provide antecedent basis for "the first and second storage bins" later recited in claim 14.

In claim 28, the examiner suggests changing "the storage bin" (at line 2) to --the at least one storage bin--, for consistency with the terminology set forth in claim 18, line 2.

In claim 59, "at least one storage bin" (at lines 14-15) should be changed to --a first storage bin--, to provide antecedent basis for "the first storage bin" recited in claims 62 and 64.

In claim 63, "a second end" (twice recited, at line 2) should be changed to --the second end--, for proper reference to "a second end of the first pipe guide" and "a second end of the

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second pipe guide” set forth in claim 59.

In claim 74, it is suggested that each recitation of “at least one storage bin” (at lines 2-5 and 7, recited four times) be changed to --storage bins--, since it is noted that plural storage bins are recited in the claim. Also, “the at least one storage bin” (at line 10) should be changed to --a first storage bin--, to provide antecedent basis for the first storage bin later recited in claim 78.

In claim 77, “a second end” (twice recited, at line 2) should be changed to --the second end--, for proper reference to “a second end of the first pipe guide” and “a second end of the second pipe guide” set forth in claim 74.

In claim 84, “a second end” (twice recited, at line 2) should be changed to --the second end--, for proper reference to “a second end of the first pipe guide” and “a second end of the second pipe guide” set forth in claim 32.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3, 18-21, 23-29, 31 and 72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, it is unclear as to the relationship between “a first valve coupled to the hose for isolating the dust collector from the storage bin on a selective basis” and “a fourth valve for isolating the dust collector from the storage bin on a selective basis” from claim 1.

Regarding claim 18, the relationship between the “at least one storage bin” (at line 2), “at

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least two storage bins” (at line 13), and “one or more of storage bins” (at line 16) is unclear. Furthermore, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). The claim recites the broad limitations of “at least one storage bin” or “one or more of storage bins”, and the claim also recites “at least two storage bins”, which is the narrower statement of the limitations. Claims 19-21, 23-29, 31 and 72 depend from claim 18.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 18-21, 24, 26, 27, 29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman (US 4,005,908) in view of Krambrock et al. (US 4,301,880).

Regarding claims 18 and 29, Freeman (see FIG. 1) discloses an apparatus comprising: at least one storage bin (i.e., which scope includes “one” storage bin **10**); and a loading unit (i.e.,

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comprising batching vessel **44** and filter assembly **64**) positioned at a location remote from the location of the at least one storage bin; wherein the loading unit is adapted to be in fluid communication with the at least one storage bin (i.e., via conduit **53**) and a point of use (i.e., via conduit **116**) on a selective basis (i.e., by manipulation of, e.g., valves **55**, **118**); and wherein the loading unit is capable of being evacuated (i.e., via conduit **124** and pump **120**) so that a resulting vacuum within the loading unit draws material from the at least one storage bin, and the loading unit is capable of being pressurized (i.e., by supplying air via pump **120** and conduits **130**, **112**, and manipulation of valves), so that material may be transferred to its point of use; (see column 3, lines 55-59; column 4, lines 28-45). The apparatus further comprises a plurality of load cells (i.e., labeled SCALES in FIG. 1; see column 5, lines 43-55) for measuring a weight of the loading unit and the material within the loading unit; and a controller (i.e., labeled CONTROL in FIG. 1) capable of receiving inputs from the load cells (i.e., from scales **160**, via an electrical control circuit; see FIG. 4) in order to monitor the weight of the loading unit and the weight of material drawn from the at least one storage bin.

Although Freeman does not disclose that the point of use comprises, specifically, a fluidized catalytic cracking unit, the unit is not considered an element of the claimed apparatus. Note the recitation of an intended use of the system “*for* storing and loading catalyst and/or additives into a fluidized catalytic cracking unit” in the preamble of the claim, and the limitation that the loading unit is merely “*adapted to* be in fluid communication with... the fluidized catalytic cracking unit” at lines 4-6. The apparatus of Freeman would be capable of performing the intended use as claimed, and therefore the apparatus meets the claim. In addition, the recitations with respect to the manner of operating the apparatus or the materials worked upon by

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the apparatus do not impart patentable weight to the claim. See MPEP §§2114, 2115.

The apparatus of Freeman is therefore the same as the claimed apparatus, except that Freeman fails to disclose a manifold capable of placing the loading unit in fluid communication with at least two storage bins on a selective basis, or the provision of at least two storage bins.

Krambrock et al., however, teaches a conventional apparatus for transferring bulk materials (see FIG. 4, mistakenly described as FIG. 2 in column 3, line 58 to column 4, line 11; alternatively, FIG. 5, mistakenly described as FIG. 3 in column 4, lines 12-21), said apparatus comprising a loading unit, a first bin for storing a first material, a second bin for storing a second material, and a plurality of load cells (i.e., illustrated as a “Δ” but not labeled) for measuring the weight of the loading unit and material drawn into the loading unit; wherein a manifold (see FIGs. 4, 5; labeled as a suction collecting switch **14**) is capable of placing the loading unit in fluid communication with at least two storage bins on a selective basis (i.e., by manipulating a first valve **18** for isolating the first bin from the loading unit; by manipulating a second valve **19** for isolating the second bin from the loading unit; etc.).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to provide the claimed manifold and at least two storage bins in the apparatus of Freeman, on the basis of suitability for the intended use and absent a showing of unexpected results thereof, because such elements would allow for the conveyance of bulk materials from a plurality of sources to a single destination, as taught by Krambrock et al. Furthermore, the duplication of parts (i.e., plural storage bins) would have been considered obvious to those of ordinary skill in the art. See also MPEP § 2144.04.

Regarding claims 19, 27 and 31, Freeman discloses that the loading unit comprises a dust

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collector (i.e., filter assembly **64**) and a transfer pot (i.e., defined by cylindrical wall **48** and bottom section **46**), wherein the dust collector and the transfer pot each comprise a respective sidewall, and wherein the dust collector adjoins the transfer pot. (see FIG. 1).

Regarding claim 20, Freeman discloses that the apparatus comprises a vacuum producer (i.e., pump **120**; FIG. 1) capable of evacuating the loading unit.

Regarding claim 21, Freeman discloses that the dust collector comprises a filter (FIG. 3; column 2, line 45 to column 3, line 12) in fluid communication with the vacuum producer (via line **124**), capable of collecting dust generated by the transfer of material from the storage bin.

Regarding claim 24, Freeman discloses that the dust collector comprises a substantially cylindrical upper portion (i.e., including annular base section **66**) and an adjoining, substantially conical lower portion (i.e., tapered section **50**); and the transfer pot comprises a substantially cylindrical upper portion (i.e., cylindrical section **48**) and a substantially conical lower portion (i.e., bottom section **46**) adjoining the upper portion of the transfer pot.

Regarding claim 26, Freeman discloses that the lower portion **46** of the transfer pot has an opening for permitting material to be transferred to a point of use (i.e., via conduit **116**).

6. Claims 23 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman (US 4,005,908) in view of Krambrock et al. (US 4,301,880), as applied to claim 18 above, and further in view of Carter (US 3,542,091).

Regarding claim 23, Freeman discloses that the loading unit is mounted on a plurality of legs **56, 58, 60, 62** (see column 2, lines 36-39), wherein the legs are mounted on the load cells (i.e., labeled SCALES). Freeman, however, fails to disclose a cabinet for housing the dust collector and transfer pot. In any event, it would have been obvious for one of ordinary skill in

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the art at the time the invention was made to provide a cabinet for housing the loading unit in the apparatus of Freeman, because the provision of a cabinet for housing solids handling equipment, for preventing contamination of the solids being handled and the surrounding environment, would have been considered conventional to one having ordinary skill in the art, as evidenced by Carter (e.g., housing 2, FIGs. 1, 2).

Regarding claim 72, the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. The modified apparatus of Freeman, with a cabinet, would be capable of functioning as a shipping container.

7. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman (US 4,005,908) in view of Krambrock et al. (US 4,301,880), as applied to claim 18 above, and further in view of Harpham (WO 00/48723).

Freeman is silent as to the location of the loading unit being no more than approximately twenty feet from the storage bin. In any event, it would have been an obvious design choice for one of ordinary skill in the art at the time the invention was made to configure the location to be no more than approximately twenty feet away in the apparatus of Freeman, on the basis of suitability for the intended use and absent a showing of unexpected results thereof, e.g., in order to minimize the amount of space occupied by the system. Furthermore, the claimed distance would have been considered conventional (see Harpham, page 4, line 19 to page 5, line 3).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection

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is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-5, 7-11, 13-21, 23-29, 31, 71 and 72 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5, 7, 8, 11-14, 16-18, 20, 21, 23, 24, 26, 28-33, 35-40, 42, 44, 45, 58, 60, 61, 63, 69 and 70 of copending Application No. 10/806,563 (see the response filed on August 2, 2010 and the examiner's amendment mailed on August 6, 2010).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant application and the copending application claim essentially the same apparatus. Application No. 10/806,563 similarly claims an apparatus comprising a

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loading unit adapted to be in fluid communication with at least one storage bin and a fluidized catalytic cracking unit, said loading unit comprising a dust collector and a transfer pot having the claimed structural configuration; a vacuum producer for generating a vacuum within the dust collector; and said transfer pot capable of being pressurized. The apparatus further comprises a plurality of load cells for measuring the weight of the dust collector, the transfer pot, and the one of the catalyst and/or additives drawn into the dust collector; the recited valves; and a controller for controlling said valves.

Response to Arguments

9. Applicant's arguments with respect to the rejection of claims 18-21, 23, 24, 26-29, 31 and 72 under 35 U.S.C. 102 and 103 (from page 19, second to last paragraph, to page 20, fourth paragraph) have been fully considered, but they are moot in view of the new grounds of rejection, necessitated by amendment. Applicant, however, further points out that,

“... US Patent 4,301,880 to Krambrock has been referenced in the Office Action with respect to other claims reciting a manifold for two or more sources of particulate. It is respectfully submitted, however, that Krambrock does not disclose employing a manifold in the context of a controller that is connected to load cells to monitor weight of the unit and catalyst and/or additive from two or more sources of catalyst and/or additive being drawn through the manifold.” (page 20, third paragraph).

As noted in the rejection under 35 U.S.C. 103, above, the primary reference to Freeman discloses an apparatus comprising a controller that is connected to load cells for monitoring the weight of a loading unit and materials drawn into the loading unit. The secondary reference to Krambrock et al. was merely relied upon to teach the provision of a manifold and a plurality of storage bins for storing particulate materials. One cannot show nonobviousness by attacking

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references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

10. Applicant's arguments with respect to the provisional rejection of claims 1-5, 7-11, 13-21, 23-29, 31, 71 and 72 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the claims of copending Application No. 10/806,563 (see paragraph bridging pages 20-21) have been fully considered. The rejection, however, has been maintained, because the Terminal Disclaimer filed on September 30, 2010 is improper (see above).

NOTE: Application No. 10/806,563 issues as U.S. Patent No. 7,846,399 on December 7, 2010.

Allowable Subject Matter

11. Upon correcting the objections to claims 59, 63, 74, 77 and 84 (see above), claims 32-45, 59-67, 74-79 and 82-85 would be allowable for the same reasons set forth in the Office Action mailed on March 30, 2010 (under item 17). In particular, the prior art does not disclose or adequately teach the claimed apparatus comprising a dust collector, vacuum producer and transfer pot, wherein a first pipe guide is in fluid communication with a first storage bin and a second pipe guide is in fluid communication with a second storage bin; said first pipe guide and said second pipe guide each having a first end secured to a sidewall of the dust collector; and said first pipe guide and said second pipe guide each having a second end secured to one another.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

* * *

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER A. LEUNG whose telephone number is (571) 272-1449. The examiner can normally be reached on 9:30 am - 5:30 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter D. Griffin can be reached on (571) 272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jennifer A. Leung/
Primary Examiner, Art Unit 1774